Vertical recording medium with thin soft magnetic film

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Abstract

A vertical magnetic recording medium includes a soft magnetic film formed on a substrate, and a vertical magnetization film formed on the soft magnetic film. mu.deltab>==1000, when mu is a permeability of the soft magnetic film, and deltab [nm] is a film thickness of the soft magnetic film. The permeability mu of the soft magnetic film is 5<=mu<=200, and the film thickness deltab of the soft magnetic film is equal to or less than 500 nm. Also, vertical magnetic anisotropy energy Ku [erg/cc] of the vertical magnetization film is 1x107<=Ku<=7x108, and coercive force Hc [kOe] of the vertical magnetization film in the vertical direction to a surface of the vertical magnetization film is 5<=Hc<=10